

Jason R. Boynton, Ph.D.

Sport Scientist | Performance Physiologist | Cycling Coach

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Wisconsin, U.S.A.



SUMMARY

Highly experienced and knowledgeable cycling coach and sport scientist with a passion for cycling performance and endurance training science. Both analytical and people orientated. Seeking to help cyclists at all levels of the sport reach their peak performances predictably and sustainably.

PROFESSIONAL EXPERIENCE

Cycling Coach & Sport Scientist

Boynton Coaching LLC, 2007 - present

Team EF Coaching, 2023 - 2024

- Level 1 USA Cycling cycling coach (highest accreditation)
- Instruct athletes how to train and explain underlying physiology
- Conduct regular discussions with athletes about goals and progress
- Analyze qualitative and quantitative athlete training data
- Prescribe weekly, individualized workouts based on athlete data and feedback
- Develop: training and heat acclimation interventions; performance & physiological testing protocols; training data analysis tools
- Prescribe and administer performance and physiological testing to athletes; analyze and report test results to athletes
- Stay current with and collect/organize endurance performance, and exercise & environmental physiology literature
- Deliver presentations on exercise physiology and sport science topics to endurance athletes and coaches
- Write science-based blogs on endurance sport topics for websites

Expert Witness – Cyclist Injury Litigation

County Court of Victoria - Case No. CI-22-02086, 2024

- Delivered expert testimony and written analysis in a cyclist personal injury case
- Conducted detailed analyses of cyclist GPS data, incident video & cyclist actions, and data collected onsite
- Provided expert opinion regarding party negligence and risk mitigation

Podcast Co-host

The Cycling Performance Club Podcast, 2021 - 2023

- Co-produced, co-hosted, and promoted 47 professional focused podcast episodes
- Presented and discussed in-depth analyses of topics relevant to cycling performance
- Interviewed leading researchers, professionals, and athletes in endurance sport
- Provided editing and technical support during podcast production

Teaching Assistant

Edith Cowan University, 2016 - 2017

- Taught Exercise Physiology I & II laboratory sections for three semesters

Personal Trainer

Boynton Coaching LLC, 2010 - 2015

- AFAA certified personal fitness trainer
- Instructed clients how to exercise safely and effectively
- Lead regular workout sessions with clients
- Encouraged clients to reach their health and fitness goals

Associate Research Specialist

University of Wisconsin School of Medicine and Public Health, 2014 - 2015

- Compiled and analyzed data from cardiac ablation studies and healthcare databases
- Completed ethics applications for review by the institutional review board
- Assisted in medical research study design
- Supervised undergraduate researchers

Human Performance Research Coordinator

University of Wisconsin - Whitewater (Contracted), 2013

- Managed human performance/supplement research studies in collaboration with an industry partner
- Recruited human subjects for research studies
- Delegated duties to lab staff
- Scheduled lab sessions and procedures
- Recorded and managed study data
- Maintained adherence to IRB approved protocol

EDUCATION

Ph.D. in Exercise and Sports Science

Edith Cowan University, Perth, Western Australia, July 2020

- Thesis title: The effects of environmental temperature on high-intensity interval training
- Research focus: high-intensity interval training, cycling performance, and environmental physiology
- Supervisors: Chris Abbiss, Ph.D., Paolo Menaspà, Ph.D., Jeremiah Peiffer, Ph.D.
- Grade: Recommended for university medal in research by thesis examiner

M.S. in Exercise Physiology

Eastern Michigan University, Ypsilanti, Michigan, April 2013

- Thesis title: Supra-maximal exercise and reactive oxygen species in trained cyclists
- Thesis committee: Stephen J. McGregor, Ph.D., Lynne M. Shetron-Rama, Ph.D., Christopher Herman, Ph.D.

- Additional research: Predicting twenty-minute power from five five-minute intervals in competitive cyclists
- Grade: 3.93/4.0

B.S. in Cell Biology and Physiology with an honors emphasis

University of Wisconsin - Whitewater, Whitewater, Wisconsin, December 2005

- Thesis title: Relationships of ACE gene polymorphisms to maximal oxygen consumption and lactate threshold in collegiate cyclists
- Thesis committee: Steven J. Albrechtsen, Ph.D., Pete Mesner, Ph.D., Kirsten Crossgrove, Ph.D.
- Activities and societies: Tri Beta National Biological Honor Society, UW-Whitewater Cycling Team
- Grade: 3.59/4.0 (cum laude Honors)

St. Mary's University, Twickenham, London, June 2004

- Undergraduate semester study abroad - Sport Science coursework

SCIENTIFIC PUBLICATIONS

In Preparation

Boynton, Jason R., Paolo Menaspà, and Chris R. Abbiss. Environmental temperature considerations for high-intensity interval training in endurance athletes. (Literature review in preparation for journal submission)

Published Journal Articles

Boynton, Jason R., Jeremiah J. Peiffer, and Chris R. Abbiss. Effect of HIIT in cool and hot on temperate performance and physiological response in trained cyclists. *The Journal of Strength and Conditioning Research* 39(3): e485-3495, 2025

Boynton, Jason R., Fabian Danner, Paolo Menaspà, Jeremiah J. Peiffer, and Chris R. Abbiss. Effect of environmental temperature on high-intensity intervals in well-trained cyclists. *International Journal of Sports Physiology and Performance* 14: 1404-1407, 2019.

Kipp, Ryan T., ***Jason R. Boynton**, Michael E. Field, Jesse F. Wang, Anton Bares, Miguel A. Leal, Nicholas H. Von Bergen, and Lee L. Eckhardt. Outcomes during intended fluoroscopy-free ablation in adults and children. *Cardiac Rhythm Management* 9: 3305-3311, 2018.

Published Abstracts

Boynton, Jason R., Tyler D. Stein, John G. Wuenstel, Kelsey A. Fitzgerald, Donovan M. Gregoire and Steven J. Albrechtsen. Beet shot supplements to improve endurance performance in cyclists and runners. *Medicine and Science in Sports and Exercise* 46(Supplement): S132, 2014.

Boynton, Jason R., Stephen J. McGregor, Lynn Shetron-Rama, Chris Herman, Andrea D. Workman, Tim Muth, Josh Gordon, Ian Ratz, and Zack Maino. Reactive oxygen species markers after multiple wingate bouts in trained and untrained subjects. *Medicine and Science in Sports and Exercise* 44(Supplement): S350, 2012.

McGregor, Stephen J., ***Jason R. Boynton**, Chris Herman, Andrea D. Workman, Tim Muth, Josh Gordon, Ian Ratz, and Zack Maino. Power and oxygen consumption during three consecutive wingates in untrained individuals compared to trained cyclists. *Medicine and Science in Sports and Exercise* 44(Supplement): S559, 2012.

Albrechtsen, Steven J., and ***Jason R. Boynton**. Predicting twenty-minute power from five five-minute intervals in competitive cyclists. *Medicine and Science in Sports and Exercise* 44(Supplement): S756, 2012.

Harder, Rachel E., Kale M. Olson, Lauren E. Koth, Holly E. Felter, Allison L. Annala, **Jason R. Boynton**, Steven J. Albrechtsen, and Kirsten Crossgrove. Relationships of ACE gene polymorphisms to experience and physiological parameters in cross country runners. *Medicine and Science in Sports and Exercise* 41(Supplement): S585-S586, 2009.

Boynton, Jason R., and Steven J. Albrechtsen. Relationships of ACE gene polymorphisms to maximal oxygen consumption and lactate thresholds in collegiate cyclists. *Medicine and Science in Sports and Exercise* 40(Supplement): S186, 2008.

*Authors contributed equally to this work as first authors.

PRESENTATIONS, POSTERS, WEBINARS & MEDIA INTERVIEWS

Boynton, Jason R. (interviewee), & Emily Laurence (author). (18-Dec-2025). *Why You Should Be Doing More Moderate Intensity Workouts* [Online magazine article]. GQ Magazine. <https://www.gq.com/story/moderate-intensity-workout-benefits>

Boynton, Jason R. (guest), & Zack Morris (host). (2023). *Jason Boynton PhD – Understanding the Effects of Temperature on Cycling Performance* [Audio podcast]. Team EF Coaching Cycling Performance Podcast.

Boynton, Jason R. (guest), & Mikael Eriksson (host). (2023). *Jason Boynton, PhD | Ep#379* [Audio podcast]. That Triathlon Show. <https://scientifictriathlon.com/tts379/#t-1677444166501>

Boynton, Jason R. (guest), & Christopher Jones (host). (2021). *Interview with Jason Boynton, PhD* [Audio podcast]. Next Level Podcast. <https://corebodytemp.com/blogs/news/next-level-podcast-interview-with-jason-boynton>

Boynton, Jason R. (2021, March 11). *The effects of environmental temperature on cycling performance: New research, new insights* [Zoom presentation]. Team Bike Exchange (aka GreenEDGE) Performance Group.

Boynton, Jason R. (guest), & Damian Ruse (host). (2021). *Heat and performance* [Audio podcast]. Semi-Pro Cycling Podcast. <https://podcasts.apple.com/sn/podcast/heat-intervals-and-performance-with-jason-boynton-ph-d/id541555808?i=1000510669201>

Boynton, Jason R. (2020, June 9 & 10). *Temperature doping: Improving indoor training by manipulating room conditions* [Webinar]. Boynton Coaching. <https://www.boyntoncoaching.com/2020/05/26/webinar-temperature-doping-improving-indoor-training-by-manipulating-room-conditions/>

Boynton, Jason R., Fabian Danner, Paolo Menaspà, Jeremiah J. Peiffer, and Chris R. Abbiss. (2018, July 5). *Effect of environmental temperature on high intensity intervals in well-trained cyclists* [Conference poster]. The 23rd Annual Congress of the European College of Sport Science, Dublin, Ireland.

Boynton, Jason R. (guest), & Zachary Schuster (host). (2017). *Wiscrossin' #17- Jason Boynton Part I* [Audio podcast]. Wiscrossin Podcast. <https://podcasts.apple.com/au/podcast/wiscrossin-17-jason-boynton-part-i/id1175547187?i=1000392101180>

Boynton, Jason R. (2016, July 8). *Cycling in the heat* [Webinar]. USA Cycling Coaching Webinars. Retrieve from usacycling.org

Boynton, Jason R. (2016, February 11). *Endurance competition in the cold* [Presentation]. Cycling Australia's U23 Men's Road Program (aka World Tour Academy) 2016 Departure Camp, Adelaide, South Australia, Australia.

Boynton, Jason R. (2016, February 11). *Training with power* [Presentation]. Cycling Australia's U23 Men's Road Program (aka World Tour Academy) 2016 Departure Camp, Adelaide, South Australia, Australia.

Boynton, Jason R. (guest), & Damian Ruse (host). (2015). *SPC126- How to apply science to your cycling* [Audio podcast]. Semi-Pro Cycling Podcast. <https://podcasts.apple.com/gb/podcast/spc126-how-to-apply-science-to-your-cycling-jason-boynton/id541555808?i=100035442818>

Boynton, Jason R. (2014, January 13th). *Finding truth in endurance sport* [Presentation]. Speed Cycling, Madison, Wisconsin, United States. <https://www.youtube.com/watch?v=zCsW4auSbCQ>

Boynton, Jason R., Tyler D. Stein, John G. Wuenstel, Kelsey A. Fitzgerald, Donovan M. Gregoire and Steven J. Albrechtsen. (2014, May 28). *Beet shot supplements to improve endurance performance in runners* [Conference presentation]. The 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, United States.

Boynton, Jason R. (2013, November 14). *A critical analysis of compression garments as a recovery modality* [Webinar]. USA Cycling Coaching Webinars. Retrieve from usacycling.org

Boynton, Jason R. (2013, October 31). *A critical analysis of blood lactate testing for cyclists* [Webinar]. USA Cycling Coaching Webinars. Retrieve from usacycling.org

Boynton, Jason R. (2013, October 17). *A critical analysis of anti-oxidants in recovery supplements* [Webinar]. USA Cycling Coaching Webinars. Retrieve from usacycling.org

Boynton, Jason R. (2013, October 3) *Applied skepticism in cycling: A methodology for an improved sport* [Webinar]. USA Cycling Coaching Webinars. Retrieve from usacycling.org

Albrechtsen, Steven J., and **Jason R. Boynton.** (2012, June 1). *Predicting twenty-minute power from five five-minute intervals in competitive cyclists* [Conference poster]. The 56th Annual Meeting of the American College of Sports Medicine, San Francisco, California, United States.

McGregor, Stephen J., **Jason R. Boynton**, Chris Herman, Andrea D. Workman, Tim Muth, Josh Gordon, Ian Ratz, Zack Maino. (2012, May 2012). *Power and oxygen consumption during three consecutive wingates in untrained individuals compared to trained cyclists* [Conference poster]. The 56th Annual Meeting of the American College of Sports Medicine, San Francisco, California, United States.

Boynton, Jason R., Stephen J. McGregor, Lynn Shetron-Rama, Chris Herman, Andrea D. Workman, Tim Muth, Josh Gordon, Ian Ratz, Zack Maino. (2012, May 30). *Reactive oxygen species markers after multiple wingate bouts in trained and untrained subjects* [Conference poster]. The 56th Annual Meeting of the American College of Sports Medicine, San Francisco, California, United States.

CONFERENCES, SYMPOSIUMS, & CLINICS

The 23rd Annual Congress of the European College of Sport Science. Dublin, Ireland. July 5th-7th, 2018.

The 62nd American College of Sports Medicine Annual Meeting. San Diego, California. May 26th-30th, 2015.

The 61st American College of Sports Medicine Annual Meeting. Orlando, Florida. May 27th-31st, 2014.

University of Wisconsin-Madison School of Medicine and Public Health Sixth Annual Bioethics Symposium; “Sex, Drugs, and Sports: Ethical Controversies in Athletics”. Madison, Wisconsin. April 4th, 2014.

USA Cycling Level One Coaching Clinic. Colorado Springs, Colorado. November 14th-17th, 2013.

The 60th American College of Sports Medicine Annual Meeting. Indianapolis, Indiana. May 28th-June 1st, 2013.

The 59th American College of Sports Medicine Annual Meeting. San Francisco, California. May 29th-June 2nd, 2012.

USA Cycling Power Certification Clinic. Ypsilanti, Michigan. November 12th-13th, 2011.

Aerobics and Fitness Association of America Personal Trainer Certification Workshop. Milwaukee, Wisconsin. August 13th-15th, 2010.

The 56th American College of Sports Medicine Annual Meeting. Seattle, Washington. May 26th-30th, 2009.

USA Cycling Level Two Coaching Clinic. Ypsilanti, Michigan. October 3rd-5th, 2008.

ONLINE PUBLICATIONS

Boynton, Jason R. (2020, November 18). Can heat acclimation really improve endurance performance?. CyclingTips. Retrieve from <https://cyclingtips.com/2020/11/can-heat-acclimation-really-improve-endurance-performance/>

Boynton, Jason R. (2020, May 25). Temperature doping: are there optimal conditions for indoor training?. CyclingTips. Retrieve from <https://cyclingtips.com/2020/05/temperature-doping-are-there-optimal-conditions-for-indoor-training/>

Boynton, Jason R. (2016, March 14). Mastering load 3: training load and injury- a cycling coach perspective [Blog post]. Retrieve from <http://physiosports.com.au/blog/mastering-load-3-training-load-and-injury-a-cycling-coach-perspective/>

Boynton, Jason R., (2014, December 17). Racing cyclocross in the cold part 3 [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/racing-cyclocross-in-the-cold-part-3/>

Boynton, Jason R., (2014, December 16). Racing cyclocross in the cold part 2 [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/racing-cyclocross-in-the-cold-part-2/>

Boynton, Jason R., (2014, November 28). Racing cyclocross in the cold: the basics of thermoregulation [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/racing-cyclocross-in-the-cold-the-basics-of-thermoregulation/>

Boynton, Jason R., (2014, November 13). Exercise metabolism for cyclists [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/exercise-metabolism-for-cyclists/>

Boynton, Jason R., (2013, August 27). Three steps to becoming a better cyclist [Blog post]. Retrieve from <https://trainingpeaks.com/blog/three-steps-to-becoming-a-better-cyclist/>

Boynton, Jason R., (2013, April 10). Busting the “big lungs” myth [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/busting-the-big-lungs-myth/>

Boynton, Jason R., (2013, March 12). What is your power user category? [Blog post]. Retrieve from <https://www.trainingpeaks.com/blog/what-s-your-power-user-category/>

Boynton, Jason R. (2012, September 26). Cyclist testing: an introduction to performance testing [Blog post]. Retrieve from <http://www.boyntoncoaching.com/2012/09/26/cyclist-testing-an-introduction-to-performance-testing/>

Boynton, Jason R. (2012, September 12). An introduction to cyclist testing [Blog post]. Retrieve from <http://www.boyntoncoaching.com/2012/09/12/introduction-to-cyclist-testing/>

GRANTS, AWARDS, AND SCHOLARSHIPS

Scholarships

Edith Cowan University Postgraduate Research Scholarship (International), 2015-2019

Eastern Michigan University Graduate Assistantship, 2008-2010

Grants

Standard Process Inc.

Title: Beet Shot Supplements to Improve Performance in Distance Runners, 2013

Funds provided: \$15,544

Role: study coordinator

Standard Process Inc.

Title: Beet Shot Supplements to Improve Human Performance, 2013

Funds provided: \$15,687

Role: study coordinator

Beta Beta Beta National Biological Honor Society

Undergraduate Research Grant, 2005

Funds provided: \$410

Role: undergraduate researcher

JOURNAL REVIEWER

Biology of Sport

International Journal of Sports Physiology and Performance

REFERENCES

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